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A STUDY OF THE EFFECTS OF DIFFERENT KINDS OF ABILITY GROUPING ON PERSONAL RELATIONSHIPS AMONG HIGH SCHOOL STUDENTS. FINAL REPORT.

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THIS RESEARCH TRACED THE SOCIOMETRIC CHOICE PATTERNS OF PUBLIC SCHOOL PUPILS FROM GRADE 4 THROUGH GRADE 11 TO DETERMINE IF THESE PATTERNS DIFFER FOR ABILITY GROUP VERSUS RANDOM GROUP PUPILS, TO LEARN WHETHER TRENDS IN SOCIOMETRIC STATUS DURING SECONDARY SCHOOL CAN BE PREDICTED FROM DATA OBTAINED IN THE ELEMENTARY GRADES, AND TO DETERMINE WHETHER STUDENTS WHO MARKEDLY GAIN OR LOSE SOCIOMETRIC STATUS DURING SECONDARY SCHOOL DIFFER IN PERSONALITY, SCHOOL ATTITUDE, AND A VARIETY OF BIOGRAPHICAL CHARACTERISTICS. RESULTS INDICATED THAT SOCIOMETRIC CHOICE LEVELS DID NOT DIFFER FOR ABILITY GROUPED VERSUS RANDOM GROUPED PUPILS. ALTHOUGH PUPILS HAVING DIFFERENT SOCIOMETRIC STATUS PATTERNS DURING SECONDARY SCHOOL DIFFERED ON SOME VARIABLES COLLECTED AT THE ELEMENTARY SCHOOL LEVEL, THE DIFFERENCES WERE NOT LARGE ENOUGH OR CONSISTENT ENOUGH TO PERMIT PREDICTION OF FUTURE SOCIOMETRIC CHOICE TRENDS. COMPARISONS BETWEEN STUDENTS WHO HAD MADE LARGE GAINS IN STATUS BETWEEN GRADES SEVEN AND 11 AND THOSE WHO HAD MADE SIMILAR LOSSES DURING THIS PERIOD SHOWED THAT THE TWO GROUPS DIFFERED SIGNIFICANTLY ON 13 PERSONALITY VARIABLES AND EIGHT BIOGRAPHICAL VARIABLES OBTAINED AT GRADE 11. (AUTHOR)

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SUMMARY

This study is concerned with three major questions related to the long range sociometric status of a sample of students first studied at grade 4 in Cooperative Research Project 577 and followed through grade 11 in the current project. The specific questions dealt with in this study are as follows:

1. Are there significant differences in the sociometric development of pupils in an ability grouped district as compared with pupils in a random grouped district.
2. Can a selective battery of measures administered in grades 4 to 7 predict trends in sociometric status that occur between grades 7 and 11?
3. Can a battery of measures administered at grade 11 significantly differentiate between two groups of pupils, i.e., those who made the greatest gains in status between grades 7 and 11 and those who made the greatest losses in status between grades 7 and 11?

Sociometric choice measures were obtained on an initial sample of 1,031 4th grade pupils. Sociometric choice measures were subsequently obtained on pupils available from this initial sample at grades 5, 6, 7 and 11. In addition to the sociometric choice measures, a number of other measures concerned with self-concept, personality, school attitudes, scholastic aptitude and academic achievement were administered during grades 5, 6 and 7. At grade 11 subsamples of about 50 students who had made the greatest gains and losses in sociometric status since grade 7 were interviewed, administered an autobiographical questionnaire, a self-concept measure, a school attitude measure and two personality inventories.

Analysis of the data obtained indicated that the mean sociometric choice scores obtained at grade 7 and grade 11 of pupils of superior, average and slow ability levels in ability grouped versus random grouped classrooms were not significantly different. These results indicate that differences in sociometric choice patterns found at grade levels 4 through 6 in CRP 577 were not present at the secondary level.

To determine whether future sociometric trends could be predicted from test data obtained during grades 4 through 7, four groups of pupils were selected on the basis of T-scores obtained at grade 7 and 11. These groups were identified by their 7th and 11th grade status as follows: the low-low group, high-high group, Up group, and Down group. Although some significant differences were found in this phase of the study, no consistent trends emerged from the data. It appears that none of the measures obtained in grades 5, 6 and 7 in this study yield differences that are sufficiently large or sufficiently consistent to be of any value in predicting future trends in sociometric status of elementary pupils. In the third phase of the study, subsamples of about 50 pupils making large gains or losses in sociometric status between grades 7 and 11 were compared on a number of personality and attitude measures as well as biographical data collected at grade 11. On the two personality inventories employed, the 16PF and CPI, the Up and Down groups were significantly different at at least the 10 per cent level on 13 variables. The two groups were also significantly different on attitude towards peers and on eight of the biographical variables that were compared. These results would suggest that pupils improving in sociometric status during the secondary school years can be differentiated on a number of variables from pupils losing status.

INTRODUCTION

The Problem

A four-year research project, Cooperative Research Project 577, concerned with ability grouping, demonstrated a number of interesting and significant differences between the sociometric choice patterns of pupils of different ability levels in ability-grouped and random grouped elementary school classrooms. The limited time and scope of CRP 577 did not permit checking these findings relative to secondary school pupils, although data were collected for pupils in grade seven.

The research described herein is designed to achieve several goals. One is to check the elementary school sociometric results obtained in CRP 577 against the sociometric status patterns evidenced by the same pupils at the junior high school and high school level. Data collected in this study, when combined with the data from CRP 577, provides sociometric choice scores at grades 4, 5, 6, 7 and 11 for a sample of the subjects studied in CRP 577.

These data also permit exploring other aspects of sociometric choice. A study of the characteristics of pupils who gained and lost status to a significant degree during the period that has been spanned was designed to give us new insights into the factors related to popularity and rejection in the pre-adolescent and adolescent peer groups.

In summary, the study is concerned with three major questions:

1. Are there significant differences in the sociometric development of pupils in an ability grouping situation between grades 7 and 11 as compared with similar pupils in a random grouping situation?
2. Can a selected battery of measures administered in grades 4 to 7 predict trends in sociometric status that occur between grades 7 and 11?
3. Can a battery of measures administered at grade 11 significantly differentiate between two groups of pupils, i.e., those who made the greatest gains in status between grades 7 and 11 and those who made the greatest losses in status between grades 7 and 11?

Related Literature

The evaluation of ability grouping, (Borg, 1964) which this study is intended to supplement, examined the effects of homogeneous versus heterogeneous grouping practices on the sociometric structure of elementary school classrooms. Sociometric choice patterns, accuracy of perceived status, and the long range stability of these two factors were studied. The main source of data in this project was a large (N varied from over 700 to over 1000) sample of pupils from two school districts as they progressed through the fourth, fifth, and sixth grades. In addition, just the sociometric status patterns were studied for a different sample of 962 pupils during their sixth grade year only. In general, the results showed that ability grouping at the elementary level provided average and slow pupils with a better chance for social recognition than did random grouping.

It was also found that ability grouping did not create the leadership vacuum in average and slow groups that has been suggested by some educators.

Another recent study (Drews, 1962) provides valuable evidence on the effects of homogeneous and heterogeneous grouping upon sociometric status. Her study of superior, average, and slow pupils in ninth grade English classes employed six three-choice sociometric questions. Two of these questions required pupil choices on social variables. Pupil choices were limited to individuals in their English class, which places considerable restriction on choices in the departmentalized junior high school situation. The results of the Drews study indicate that although a smaller proportion of slow than superior pupils in either treatment gained positions of social recognition, the slow pupil had almost no chance to gain status in a heterogeneous class. Drews' study covered a period of one year and does not provide information on the long term effects of grouping. Many psychologists have stressed the importance of peer acceptance during the adolescence period. In this frame of reference, both Drews' (1962) and Borg's (1964) studies provide support for ability grouping, the former at the junior high school level, and the latter at the elementary school level.

The literature concerning the social aspects of ability grouping includes evidence to support almost any stand one might take. Those who oppose grouping frequently cite the studies of Mann (1957) and Luchins and Luchins (1948). Mann's research concluded that there was little real friendship between superior, average, and below average students in heterogeneously grouped classrooms. In this study, 67 gifted pupils in a total sample of 280 fifth and sixth graders were placed in regular classes for

half of their work and in special workshop rooms with other gifted children for the other half. There were more acceptances and rejections of the gifted by the gifted than by typical children. Typical children, as a group, also tended to accept and reject more typical children than workshop children. These findings seem to suggest that friendship choices were made primarily on the basis of intelligence. This is evidence (Scandrette, 1958) that students will select as friends those with whom they associate more. With this in mind one might speculate as to whether the sociometric results of Mann's study were not in part due to greater contact among the gifted than between gifted and typical children.

Luchins and Luchins (1948) interviewed 190 fourth, fifth, and sixth grade children in ability grouped classes. They reported that the children were aware of the grouping and that it appeared to create a caste system in the school. Lower ability groups appeared to feel inferior and ostracized and much aware of the stigma attaching to their class. There was no control group in this study and the design does not permit one to conclude that the findings were attributable to ability grouping.

Gronlund (1959) thoroughly reviewed the literature on sociometry in the classroom and concluded (p. 193) that ability grouping is in greater harmony with pupils' preference than is commonly believed, but that a stigma is attached to low ability groups.

Student attitude toward ability grouping was examined by Klausmeier, Mulhern and Wakefield (1960). Subjects were selected from three high schools with enrollments of 700, 1013, and 2160 students. All of these schools sectioned classes on the basis of achievement and I.Q. Pupils

named five friends, now in school and indicated reasons (from a prepared listing of being in the same classes, same school activities, same neighborhood and church) for the choices. Being in the same school activities was far more frequently given as a reason than being in the same classes or neighborhood and church. High ability group pupils gave more weight to being in the same classes than did low ability pupils who gave relatively more weight to being in the same neighborhood or church. All ability groups favored continuing sectioning practices. The authors concluded that sectioning improved learning opportunities and was approved by the majority of both students and teachers. When non-class activities are available, sectioning in more of the subjects required for graduation does not produce appreciable undesirable social effects in the comprehensive high school. Apparently, neighborhood and church activities are more frequently used as social outlets by the low than by high ability students. Students are more likely to develop undesirable social attitudes in ability grouped sections than in ungrouped sections. Studies pertinent to this topic are reported by Goldberg, Passow and Lorge (1958), Goldworth (1959), Rochfort (1959), and Bell (1959).

METHOD

Subjects

The pool of subjects for this research included all pupils who were in the 4th grade sample employed in CRP 577 (1031 pupils), who were subsequently given the sociometric measure at the end of grade 7 and were still present in one of the 4 high schools serving the participating school districts and completed the sociometric measure administered at grade 11. The number of subjects involved in different phases of this study varies. Some of these variations are due to the fact that complete data were not available for all pupils. In other cases, special subgroups were selected for analysis to provide information that could not be obtained by studying the entire sample.

Measures

The dependent variable in this research was sociometric status. At grades 4, 5 and 6 a conventional near-sociometric nomination measure was used in which pupils listed their 5 best friends, the 5 children with whom they preferred to study, and the 5 children they would not want with them if transferred to another class.

At secondary level the broader scope of student social contacts and the elimination of the self-contained classroom make simple nomination measures limited to a single classroom inappropriate. Thus, for measuring sociometric status at grades 7 and 11, a different approach was used. For the 7th grade measure of sociometric status two approaches were used. In the first approach called the Friendship Check List, all 7th grade pupils

in the school were randomly placed on school rosters of about 100 students. Each student was given one roster and first asked to indicate their level of acquaintance with each pupil listed on a 4 point scale ranging from "close friend" to "don't know this person". Then students were asked to go over the list again, this time indicating whether or not they would like to have each person listed as a closer friend. Again a 4 point scale was used ranging from "like to have as a closer friend" to "prefer not to have as a friend". Each student's sociometric score was then computed on the basis of the choices of the 100 classmates who completed the checklist containing his name.

The second technique, called the Friendship Questionnaire was simpler, merely requiring each student to list in order his 5 best friends. Each student's score was determined by adding the number of times he was nominated. Essentially, the same two measures were used at grade 11. Sociometric scores were converted to T-scores to permit comparing the scores obtained at different age levels.

In addition to the sociometric data, other information were obtained during grades 5, 6 and 7. These included:

1. Index of Adjustment and Values (IAV) - designed to measure self-concept.
2. California Test of Personality - designed to measure pupil adjustment.
3. SRA Junior Inventory - a problem checklist.
4. USU School Inventory - an attitude scale.
5. California Short Form Test of Mental Maturity
6. Sequential Tests of Educational Progress (STEP). The tests in mathematics, science, reading and social studies were used.

At grade 11 a battery of tests was administered to a subsample of pupils whose sociometric status had changed markedly since grade 7. This battery included:

1. California Psychological Inventory (CPI).
2. The Sixteen Personality Factors Questionnaire (16PF) - Forms A and B.
3. Index of Adjustment and Values (IAV).
4. USU School Inventory.
5. An autobiographical questionnaire.
6. A short interview.

RESULTS

Sociometric Differences in Ability Grouped Versus Random Grouped District

The first phase of the study was designed to determine whether significant differences were present between the sociometric development of pupils in ability grouped situations between grade 7 and 11 as compared with similar pupils in a random grouped situation. This phase of the study was also aimed at determining whether changes in sociometric status among pupils of different ability levels that had begun to emerge in grades 4 to 6 would continue at secondary level. The main trend observed in the original study (CRP 577) was that pupils in the low ability classification tended to emerge as sociometric leaders significantly more frequently in ability grouped classrooms than in random grouped classrooms. To a lesser degree this trend was also present for pupils of average ability. Thus, it would appear that such pupils would gain peer group leadership experience in ability grouped classrooms which might be expected to persist and be reflected in their status at the secondary school level. Analysis relative to thise phase of the research is summarized in Tables 1 and 2. In Table 1 the mean sociometric T-scores obtained at grade 7 are compared for pupils at the superior, average, and slow levels in ability grouped versus random grouped classrooms. If the trend found at the elementary grades had persisted, one would expect to find slow students in ability grouped classrooms obtaining higher mean scores on the sociometric measures than similar pupils in random group classrooms. It may be seen in Table 1 that none of the differences between pupils of

comparable ability in ability grouped versus random grouped classrooms were statistically significant.

Table 2 provides the same information for the sociometric measures obtained at grade 11. Again, it may be seen that no significant differences emerged. Further analysis indicated that no significant differences between the gains made by ability grouped versus random grouped pupils of comparable ability level were present. Thus, these data would suggest that any gains in peer group status realized by average or low ability pupils in ability grouped classrooms at the elementary level do not continue into the secondary level. It will be noted that for both districts the typical sociometric pattern emerged at secondary level in which superior pupils are most popular on the average followed by pupils of average and slow ability, generally in that order.

Prediction of Future Sociometric Trends

The next phase of the study was designed to determine whether test data related to self-concept, personality and pupil attitude obtained during grades 4 through 7 could predict trends in sociometric status that occurred between grades 7 and 11. On the basis of sociometric choice T-scores obtained at grade 7 and 11, four groups of subjects were selected for this phase of the study. The first of these groups is called the low-low (L-L) group (N=34). These pupils had low sociometric status T-scores at the 7th grade level and again at the 11th grade level. The high-high group (H-H) was made up of pupils whose sociometric status was high at the 7th and 11th grade levels (N=49). The third group is the Up group (Up).

This group started with a low status in 7th grade and that status increased significantly by the 11th grade (N=50). These pupils gained at least 13 T-score points or 1.3 SD. The fourth group is the down group (Dn). This group had high status in the 7th grade level and dropped materially by the 11th grade (N=51). Each pupil in the down group dropped at least 12 T-score points, or 1.2 SD. The results of this phase of the analysis may be found in Table 3. In this table comparisons are made between the mean scores of the four groups taken two at a time on the various measures. An entry of "NS" indicates no significant difference between the groups indicated. Significant entries are shown by first giving the significance level and second, identifying the group that obtained the more favorable score. Thus, it may be seen that the Up group and group HH both obtained significantly more favorable self-concept scores than the Down group. It may be seen from Table 3 that the majority of differences among the four groups were not statistically significant. No consistent trends emerged from the data. As might be expected, group HH generally obtained more favorable scores in the California Test of Personality and the SRA Junior Inventory. However, it will be noted that comparisons between the Up and Down groups on these two measures showed no significant differences. Again, on the USU School Inventory the only significant differences that emerged were four favoring group HH. It is noteworthy that none of the 30 comparisons between the groups on measures in the STEP battery were statistically significant. It appears that none of the measures obtained in grades 5, 6 and 7 in this study yield differences that are sufficiently large or sufficiently consistent to be of any value in predicting future trends in the sociometric status of elementary pupils during their secondary school years.

The third phase of the study was designed to determine whether a battery of measures administered at grade 11 would significantly differentiate between students who had made significant gains in sociometric status during the secondary school years and those who had made significant losses in status over the same period. These groups were selected by convering 7th and 11th grade sociometric scores to T-scores and then identifying students making the greatest gains and losses. Once identified, these students were asked to cooperate in the study by completing a battery of tests and an interview conducted by one of the investigators. The test battery and interviews were administered Saturday and students who participated were paid $5 for their participation. A total of 54 students were originally identified for each of these groups. However, a few pupils in each group were eliminated because they failed to keep their testing appointments and could not be rescheduled.

The results of this phase of the study are summarized on Tables 4, 5 and 6. Table 4 compares the mean scores of the Up and Down groups on the Sixteen Personality Factor Questionnaire and the USU School Inventory administered at grade 11. In the table the nontechnical titles are given for the 16 PF factors. Readers should consult the Manual for Forms A and B 16 Personality Factor Questionnaire (Cattell and Eber, 1962) for a more complete description of the test factors. It will be noted that statistically significant differences between mean scores of the Up and Down groups emerged for 7 of the 16 factors. The greatest differences on the 16 PF occurred in Factors F and Q_2. In both of these factors the two groups were significantly different beyond the .01 level. Cattell and Eber (1962)

describe the high scorer on Factor F as a person who "...tends to be cheerful, active, talkative, frank, expressive, effervescent, carefree. He is frequently chosen as an elective leader." (page 14). It should be noted that on Factor Q_2, the Down group obtained the significantly higher score. The person who obtains a high score on Factor Q_2 is described in the test manual as "...temperamentally independent, accustomed to going his own way, making decisions and taking actions on his own. He discounts public opinion, but is not necessarily dominant in his relations with others. He does not dislike people, but simply does not need agreement or support." (page 17).

Table 5 provides a similar comparison between the mean scores of Up and Down group members on the 18 variables measured by the California Psychological Inventory. It will be noted that the two groups differ significantly on six of these 18 scores. These significant differences indicate the Up group to be higher in dominance, capacity for status, sociability, social presence, self-acceptance and communality.

The information summarized on Table 6 was obtained through individual interviews and a written questionnaire during grade 11. The first set of variables reported are concerned with the individual's stability within the community. It will be noted that the number of high schools attended and the number of changes of residence made by the family differentiate the two groups significantly with the Down group reporting less stability in both cases.

Family and sociometric variables are summarized next in Table 6. It may be seen that the Up and Down groups were significantly different on only

one of these variables, frequency of church attendance. The Down group reported a reduction in frequency of church attendance between grade 7 and 11 while the Up group reported about the same frequency at both grade levels. These data were collected in an area that is dominated by one church, and since most subjects in the Up and Down groups were affiliated with that church, these results may not be generalizable to other communities.

The next group of variables covered in Table 6 are concerned with social and extra-curricular activities. On two of these variables, the total number of school activities and the number of school-wide activities, the Down group reported significantly less participation.

The final category of variables in Table 6 is concerned with perceived popularity. Significant differences between the Up and Down groups were found in three of these variables. Down group members had fewer close friends, they perceived themselves as less popular than other students. They did not, however, perceive (or care to admit) that their popularity had dropped between grades 7 and 11. In contrast, Up group members were aware of their popularity rise during this period.

In summary, data from this phase of the research suggest that students making major gains in sociometric status are significantly different in a number of personality, self-concept and biographical variables from those who have made a major drop in status during the secondary school years.

CONCLUSIONS

With respect to the three major questions with which this study was concerned, it may be concluded:

1. Advantages are the trend for pupils of low ability to obtain more favorable sociometric scores in ability grouped rather than in random grouped classrooms during the 4th, 5th and 6th grades did not continue at secondary level. Students in the ability grouped district failed to show any significant differences in sociometric status at any of the three ability levels when compared with students of comparable ability from the random grouped district. In both districts the sociometric pattern usually found in random grouped classrooms emerged, i.e., superior pupils were most popular or received the highest average sociometric scores generally followed by average and slow pupils in that order.
2. From the results in the second phase of the study, it may be concluded that none of the measures obtained in grades 5, 6 and 7 yielded differences that were sufficiently large or sufficiently consistent to be of any value in predicting future trends in the sociometric status of elementary pupils during their secondary years.
3. With regard to the third phase of the study, it may be concluded that the students making major gains in sociometric status are significantly different in a number of personality, self-concept and biographical variables from those who have made a major drop in status during the secondary school years.

TABLE 1

Comparison of Pupils at Different Ability Levels in Ability Grouped vs. Random Grouped Systems on 7th grade Sociometric Status

Ability Level	Sociometric Scores: Ability Grouped N	Ability Grouped Mean	Random Grouped N	Random Grouped Mean	F-Test
(Friendship Checklist)					
Superior	62	53.69	173	54.23	NS
Average	91	51.51	109	51.46	NS
Slow	29	51.18	45	52.08	NS
(Friendship Questionnaire)					
Superior	62	54.22	173	53.75	NS
Average	91	49.92	109	51.03	NS
Slow	29	44.32	45	48.21	NS

TABLE 2

Comparison of Pupils at Different Ability Levels in Ability Grouped vs. Random Grouped Systems on 11th grade Sociometric Status

Ability Level	Sociometric Scores: Ability Grouped N	Ability Grouped Mean	Random Grouped N	Random Grouped Mean	F-Test
(Friendship Checklist)					
Superior	62	48.25	173	49.31	NS
Average	91	47.00	109	48.49	NS
Slow	45	48.17	29	47.81	NS
(Friendship Questionnaire)					
Superior	62	48.59	173	49.91	NS
Average	91	47.56	109	48.66	NS
Slow	45	50.66	29	49.49	NS

TABLE 3

5th, 6th and 7th Grade Data on Pupils in Four Sociometric Classifications

Variable	Sociometric Group Differences					
	LL vs HH	LL vs Up	LL vs Dn	HH vs Up	HH vs Dn	Up vs Dn
IAV Concept of Self	NS*	NS	NS	NS	.10 HH**	.10 Up
IAV Acceptance of Self	NS	NS	NS	NS	NS	.05 Up
IAV Ideal Self	NS	NS	NS	NS	NS	NS
IAV Discrepancy Score	NS	NS	NS	NS	NS	NS
5th Grade Sociometric Status	.01 HH	.01 Up	.05 Dn	NS	NS	NS
California Test of Personality Total Adjustment	.01 HH	NS	NS	.05 HH	NS	NS
SRA Junior Inventory						
School Problems	NS	NS	NS	NS	.10 HH	NS
Home	NS	NS	NS	NS	NS	NS
Self	.05 HH	NS	NS	NS	.05 HH	NS
Getting Along	NS	NS	NS	NS	NS	NS
Things in General	NS	NS	NS	NS	NS	NS
Total Problems	.10 HH	NS	NS	NS	NS	NS
Total Serious Problems	.10 HH	NS	NS	NS	.10 HH	NS
USU School Inventory:						
Attitude towards school	NS	NS	NS	NS	NS	NS
Attitude towards peers	.01 HH	NS	NS	.05 HH	NS	NS
Attitude towards teacher	.01 HH	NS	NS	.05 HH	NS	NS
CMM Language MA	NS	NS	NS	NS	NS	NS
CMM Nonlanguage MA	.10 HH	.05 Up	NS	NS	NS	.10 Up
STEP Math	NS	NS	NS	NS	NS	NS
STEP Science	NS	NS	NS	NS	NS	NS
STEP Reading	NS	NS	NS	NS	NS	NS
STEP Social Studies	NS	NS	NS	NS	NS	NS
STEP Total	NS	NS	NS	NS	NS	NS

* Not significant

** Level of significant entries is given along with group that obtained the more favorable mean score, thus .10 HH indicates that a difference significant at .10 level was found favoring group HH.

TABLE 4

Differences Between Up and Down Groups

on the Sixteen Personality Factor Questionnaire (16 PF) and USU School Inventory

Factor Title (non-technical)	Up Group Mean	Down Group Mean	F-test
16 PF-A - Reserved (low score) vs. Outgoing (high score)	22.92	20.79	2.99*
B - Less intelligent vs more Intelligent	15.59	14.73	1.67
C - Affected by feelings vs Emotionally Stable	30.42	30.65	.030
E - Humble vs Assertive	21.76	22.46	.26
F - Sober vs Happy-go-lucky	35.96	31.33	8.13***
G - Expedient vs Conscientious	25.90	26.06	.01
H - Shy vs Venturesome	29.83	26.15	3.62*
I - Tough-minded vs Tender-minded	22.26	19.92	4.24**
L - Trusting vs Suspicious	17.48	18.77	1.23
M - Practical vs Imaginative	22.51	22.30	.04
N - Forthright vs Shrewd	19.87	20.86	1.40
O - Placid vs Apprehensive	23.18	23.13	.01
Q_1 Conservative vs Experimenting	16.52	18.19	4.15**
Q_2 Group dependent vs Self-sufficient	16.29	20.07	18.12***
Q_3 Undisciplined Self-Conflict vs Controlled	20.57	22.54	3.64*
Q_4 Relaxed vs Tense	26.03	25.40	.14
USU School Inventory			
Attitude towards school	64.00	64.12	.00
Attitude towards teachers	18.05	17.62	.54
Attitude towards peers	96.01	89.91	6.70**

* Significant at .10 level
** Significant at .05 level
*** Significant at .01 level

TABLE 5

Differences Between Up and Down Groups
on the California Psychological Inventory (CPI)

Variable	Up Group Mean	Down Group Mean	F-test
DO - Dominance	28.26	25.55	5.17*
CS - Capacity for Status	18.32	16.11	6.61*
SY - Sociability	25.45	23.00	7.57**
SP - Social Presence	36.00	33.11	8.15**
SA - Self Acceptance	22.23	20.24	5.91*
WB - Sense of Well-being	33.70	32.52	1.16
RC - Responsibility	28.03	27.65	.14
SO - Socialization	37.01	35.59	1.25
SC - Self Control	22.49	24.52	1.60
TO - Tolerance	19.11	18.24	.72
GI - Good Impression	14.68	15.33	.28
CM - Communaltiy	26.17	25.03	5.82*
AC - Achievement via Conformance	24.26	24.11	.02
AI - Achievement via Independence	16.96	16.13	1.03
IE - Intellectual Efficiency	36.24	34.76	1.49
PY - Psychological Mindedness	9.98	10.29	.45
FX - Flexibility	9.66	9.24	.47
FE - Femininity	20.35	19.13	1.41

* Significant at .05 level
** Significant at .01 level

TABLE 6

Comparisons Between Up and Down Groups

on Biographical Variables Obtained in Grade 11

Variable	Level of Significance Chi Square	Remarks
STABILITY		
1. Number of Elementary Schools Attended	NS*	
2. Number of Junior High Schools Attended	NS	
3. Number of High Schools Attended	.01	More of down group had attended two high schools
4. Number of moves (family residence) since 7th grade	.05	Down group moved more frequently
FAMILY AND SOCIOMETRIC VARIABLES		
5. Does/does not live with both parents	NS	
6. Socioeconomic Level	NS	
7. Number of siblings	NS	
8. Birth Order	NS	
9. Working vs Non-working Mother	NS	
10. Hours spent by family in organized activity each week	NS	
11. Religious affiliation	NS	
12. Frequency of church attendence (7th grade)	NS	
13. Frequency of church attendence (11th grade)	.01	Down group dropped in church attendence between grades 7 and 11
14. Car ownership and access	NS	
15. Amount of spending money each week	NS	

* Chi Square indicates no significant difference between Up and Down Group.

Variable	Level of Significance Chi Square	Remarks
SOCIAL AND EXTRACURRICULAR ACTIVITIES		
16. Total school activities listed grade 11	.01	Down group engaged in fewer activities; 40% of down group reported no activities
17. Number of school-wide activities	.01	Down group engaged in few school wide activities, 60% reported no such activities
18. Amount of Dating	NS	Trend towards fewer dates for down group
PERCEIVED POPULARITY		
19. Number of friends, 7 vs 11th grade	NS	
20. Number of persons in their group of close friends	.05	Down group had fewer close friends
21. Reported desire for more close friends	NS	
22. Length of time students have had present friends	NS	
23. Number of time group of close friends has changed since 7th grade	NS	
24. Perceived popularity relative to other students	.01	Down group perceived themselves as less popular
25. Perceived popularity in 7th vs 11th grades	.01	Up group were aware of popularity rise, down group were not aware of or would not admit popularity drop

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APPENDIX D.--ERIC REPORT RESUME

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DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
OFFICE OF EDUCATION

ERIC REPORT RESUME

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102 on Personal Relationships Among High School Students
103

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600 DESCRIPTIVE TERMS
601 Sociometric choice in ability grouping and random grouping,
602 prediction of sociometric choice trends, characteristics of
603 students gaining and losing status.
604
605
606

607 IDENTIFIERS

800 ABSTRACT
801 This research traced the sociometric choice patterns of public
802 school pupils from grade 4 through grade 11 to determine if
803 these patterns differ for ability group versus random group
804 pupils, to learn whether trends in sociometric status during
805 secondary school can be predicted from data obtained in the
806 elementary grades, and to determine whether students who
807 markedly gain or lose sociometric status during secondary
808 school differ in personality, school attitude and a variety
809 of biographical characteristics. Results indicated that
810 sociometric choice levels ~~did not~~ differ for ability grouped
811 versus random grouped pupils. Although pupils having
812 different sociometric status patterns during secondary
813 school differed on some variables collected at the elementary
814 school level, the differences were not large enough or
815 consistent enough to permit prediction of future sociometric
816 choice trends. Comparisons between students who had made
817 large gains in status between grade 7 and 11 and those who
818 ~~had made similar losses during this period showed that the~~
819 two groups differed significantly on 13 personality variables
820 and 8 biographical variables obtained at grade 11.
821
822